

Title (en)  
ULTRASONIC PROBE

Title (de)  
ULTRASCHALLSONDE

Title (fr)  
SONDE A ULTRASONS

Publication  
**EP 2000097 A1 20081210 (EN)**

Application  
**EP 07737321 A 20070216**

Priority  
• JP 2007053328 W 20070216  
• JP 2006094853 A 20060330

Abstract (en)  
An ultrasonic probe (U) is configured such that: a piezoelectric element group (2) is housed within a sealed container (3) so as to be rotated and oscillated left and right about a center line that equally divides a plate surface of the piezoelectric element group (2); and the sealed container (3) is filled with a liquid (L) that serves as an acoustic medium, and in the sealed container (3) there are provided an inlet hole (10) for the liquid (L) as well as an exhaust hole (13), to the inlet hole (10) there is connected a flexible tube (15) that functions as a diaphragm, and on the flexible tube (15) and the exhaust hole (13) there are respectively provided sealing lids (11a, 11b). As a result, there is provided an ultrasonic probe that prevents an occurrence of air bubbles in a liquid that serves as an ultrasonic wave medium, and that realizes excellent ultrasonic characteristics.

IPC 8 full level  
**A61B 8/00** (2006.01); **G01N 29/28** (2006.01); **H04R 17/00** (2006.01)

CPC (source: EP US)  
**A61B 8/4281** (2013.01 - EP US); **A61B 8/4461** (2013.01 - EP US); **A61B 8/483** (2013.01 - EP US); **G10K 11/02** (2013.01 - EP US);  
**A61B 8/12** (2013.01 - EP US); **A61B 8/13** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 2000097 A1 20081210; EP 2000097 A4 20090422**; CN 101360459 A 20090204; CN 101360459 B 20101110; JP 2007267817 A 20071018;  
JP 4668110 B2 20110413; US 2009049914 A1 20090226; US 7963167 B2 20110621; WO 2007125672 A1 20071108

DOCDB simple family (application)  
**EP 07737321 A 20070216**; CN 200780001759 A 20070216; JP 2006094853 A 20060330; JP 2007053328 W 20070216;  
US 22335207 A 20070216